APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/285,639	04/02/1999	JOSEPH L. HELLERSTEIN	YO998-467	3956

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EXAMINER
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ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 04/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _18 January 2002_ .

2a) ☐ This action is FINAL.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-27_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-27_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1.   This Office Action is response to Applicants amendment filed on 01/18/2002.

2.   All claims 1-27 are pending in this application.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

3.   Claims 1-4, 7, 12-15, 18, 23-24 and 26 are rejected under 35 U.S.C. 103(a) as

being unpatentable over US Patent No. 5,930,784 issued to Hendrickson.

4.   With respect to claim 1, Hendrickson discloses computing at least one distance

metric between the at least one target collection and the source collection such that a

user can select the at least one target collection given the at least one computed

distance metric (see abstract, col. 4, lines 11-38, col. 5, lines 65-67 and col. 6, lines 1-

18) and determining at least one collection of data elements from the at least one target

dataset that best matches a collection of data elements from the source dataset (col. 2,

lines 10-25).

Hendrickson does not clearly discloses, "the target dataset ...." But, however,

Hendrickson teaches the method is especially beneficial for communicating databases

with many items, and with non-regular relationship patterns (i.e. dissimilar structure

target dataset) (col. 2, lines 17-19). Therefore, it would have been obvious to a person

of ordinary skill in the art at the time the invention was made to employ the teaching of

Hendrickson such as source and target dataset so as to obtain a method of automating

navigation between data with dissimilar structures including dataset, data elements,

collection of data elements, distance metric and computed distance metric because the

combination would provide a method for integrating data between the source and target

data and receiving and/or intercepting changed data as changed data is being applied

to the source database and logging the changed data to a log, so that the changed data

may be propagated to the target database in the automation navigation between

dynamic data with dissimilar structured environment.

With respect to claim 2, Hendrickson discloses wherein there is a plurality of

target datasets from which respective best matching target collections are determined

and respective distance metrics are computed such that the computed distance metrics

are presented to the user in a ranked order (col. 2, lines 26-36 and lines 65-67and col. 3, lines 1-13).

With respect to claim 3, Hendrickson discloses wherein the presenting step further includes presenting the respective target collection to the user along with the respective computed distance metric (abstract, col. 2, lines 27-36, col. 3, lines 1-36 and col. 4, lines 40-67).

With respect to claim 4, Hendrickson discloses wherein the presenting step further includes presenting a respective name associated with target dataset to the user along with the respective target collection and computed distance metric (abstract, col. 2, lines 27-36, col. 3, lines 1-36, col. 4, lines 11-38, col. 5, lines 65-67, col. 6, lines 1-67 and col. 7, lines 1-16).

With respect to claim 7, Hendrickson discloses a method of automating navigation as discussed in claim 1. Also Hendrickson discloses a multidimensional database spaces and operation on the dimensions as claimed (col. 5, lines 47-67, col. 6, lines 1-18, col. 7, lines 17-29 and col. 9, lines 7-26).

Claim 12 is essentially the same as claim 1 except that it is an apparatus rather than a method (see abstract, col. 4, lines 11-38, col. 5, lines 65-67 and col. 6, lines 1-18; col. 2, lines 10-25), and is rejected for the same reasons as applied to the claim 1 hereinabove.

Claim 13 is essentially the same as claim 2 except that it is an apparatus rather than a method (col. 2, lines 26-36 and lines 65-67and col. 3, lines 1-13), and is rejected for the same reasons as applied to the claim 2 hereinabove.

Claim 14 is essentially the same as claim 3 except that it is an apparatus rather than a method (abstract, col. 2, lines 27-36, col. 3, lines 1-36 and col. 4, lines 40-67), and is rejected for the same reasons as applied to the claim 3 hereinabove.

Claim 15 is essentially the same as claim 4 except that it is an apparatus rather than a method (abstract, col. 2, lines 27-36, col. 3, lines 1-36, col. 4, lines 11-38, col. 5, lines 65-67, col. 6, lines 1-67 and col. 7, lines 1-16), and is rejected for the same reasons as applied to the claim 4 hereinabove.

Claim 18 is essentially the same as claim 7 except that it is an apparatus rather than a method (col. 5, lines 47-67, col. 6, lines 1-18, col. 7, lines 17-29 and col. 9, lines 7-26), and is rejected for the same reasons as applied to the claim 7 hereinabove.

Claim 23 is essentially the same as claim 1 except that it is an article of manufacture rather than a method (see abstract, col. 4, lines 11-38, col. 5, lines 65-67 and col. 6, lines 1-18; col. 2, lines 10-25), and is rejected for the same reasons as applied to the claim 1 hereinabove.

With respect to claim 24, Hendrickson discloses computing at least one distance metric between the at least one target collection and the source collection such that a user can select the at least one target collection given the at least one computed distance metric (see abstract, col. 4, lines 11-38, col. 5, lines 65-67 and col. 6, lines 1-18) and determining one or more collections of data elements from the plurality of target dataset that best matches a collection of data elements from the source dataset, the determination being based on the structures associated with the source dataset and the

plurality of target datasets (abstract, col. 2, lines 10-26, col. 3, lines 14-38 and lines 51-67).

Hendrickson does not clearly discloses, "the target dataset ...." But, however, Hendrickson teaches the method is especially beneficial for communicating databases with many items, and with non-regular relationship patterns (i.e. dissimilar structure target dataset) (col. 2, lines 17-19). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teaching of Hendrickson such as source and target dataset so as to obtain a method of automating navigation between data with dissimilar structures including dataset, data elements, collection of data elements, distance metric and computed distance metric because the combination would provide a method for integrating data between the source and target data and receiving and/or intercepting changed data as changed data is being applied to the source database and logging the changed data to a log, so that the changed data may be propagated to the target database in the automation navigation between dynamic data with dissimilar structured environment.

Claim 26 is essentially the same as claim 24 except that it is an apparatus rather than a method (see abstract, col. 4, lines 11-38, col. 5, lines 65-67 and col. 6, lines 1-18; abstract, col. 2, lines 10-26, col. 3, lines 14-38 and lines 51-67), and is rejected for the same reasons as applied to the claim 24 hereinabove.

5.   Claims 5-6, 8-11, 16-17, 19-22, 25 and 27 are rejected under 35 U.S.C. 103(a)

as being unpatentable over US Patent No. 5,930,784 issued to Hendrickson in view of

US Patent No. 5,970,490 issued to Morgenstern.

With respect to claim 5-6, Hendrickson discloses a method of automating

navigation as discussed in claim 1.

Hendrickson does not explicitly indicate, "wherein the source collection of data

elements is specified by a source collection descriptor and the at least one target

collection of data elements is specified by a target collection descriptor; wherein the

data is organized in a relational database and further wherein the determining step

includes deleting at least one attribute associated with the target collection descriptor

that is not present in the source collection descriptor."

However, Morgenstern discloses SQL query for collection descriptor in the

relational databases as claimed (col. 1, lines 39-60, col. 9, lines 33-43, and col. 18, lines

51-67); and relational databases and attribute associated with SQL query for collection

descriptor as claimed (col. 10, lines 9-67, and col. 11, lines 1-15).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to combine the teachings of Hendrickson with the

teachings of Morgenstern so as to obtain have a method of automating navigation

between data with dissimilar structures including dataset, data elements, collection of

data elements, distance metric and computed distance metric because the combination

would provide a method for integrating data between the source and target data

including providing an interoperability with specifications for transforming the data into a

common intermediate representation of the data using the specifications, transforming

the intermediate representation of the data into a specialized target representation using

the specifications (Morgenstern - col. 2, lines 60-67, and col. 3, lines 1-34) in the

automation navigation between dynamic data with dissimilar structured environment.

With respect to claim 8-9, Hendrickson discloses a method of automating

navigation as discussed in claim 1. Also Hendrickson discloses the distance metric as

claimed (col. 4, lines 11-38, col. 5, lines 65-67 and col. 6, lines 1-18).

Hendrickson does not explicitly indicate, "generating at least one preliminary

target collection descriptor associated with the at least one target collection by

transforming a source collection descriptor associated with the source collection; and

removing constraints associated with the at least one preliminary target collection

descriptor until a non-null element collection is obtained; wherein the source collection

of data elements is specified by a source collection descriptor and the at least one

target collection of data elements is specified by a target collection descriptor and

further wherein the computing step includes calculating the difference between

constraints in the source collection descriptor and the target collection descriptor to

compute the distance metric."

However, Morgenstern discloses target collection descriptor; removing

constraints associated with the at least one preliminary target collection descriptor until

a non-null element collection is obtained as claimed (col. 10, lines 9-67, col. 11, lines 1-

15, col. 1, lines 39-60, col. 9, lines 33-43, and col. 18, lines 51-67) and source collection

of data elements is specified by a source collection descriptor and the target collection

of data element is specified by a target collection descriptor and the calculating the

difference between constraints in the source collection descriptor and the target

collection descriptor to compute the distance metric as claimed (col. 1, lines 39-60, col.

9, lines 33-43, and col. 18, lines 51-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to combine the teachings of Hendrickson with the

teachings of Morgenstern so as to obtain have a method of automating navigation

between data with dissimilar structures including dataset, data elements, collection of

data elements, distance metric and computed distance metric because the combination

would provide a method for integrating data between the source and target data

including providing an interoperability with specifications for transforming the data into a

common intermediate representation of the data using the specifications, transforming

the intermediate representation of the data into a specialized target representation using

the specifications (Morgenstern - col. 2, lines 60-67, and col. 3, lines 1-34) in the

automation navigation between dynamic data with dissimilar structured environment.

With respect to claim 10-11, Hendrickson discloses a method of automating

navigation as discussed in claim 1. Also Hendrickson discloses the distance metric as

claimed (col. 4, lines 11-38, col. 5, lines 65-67 and col. 6, lines 1-18).

Hendrickson does not explicitly indicate, "wherein attributes of the constraints are

weighted in accordance with their importance; wherein the distance metric is

proportionally larger when the source and target collection descriptors differ by an

attribute of a constraint that has a heavier weight associated therewith."

However, Morgenstern discloses the attributes of the constraints are weighted as claimed (col. 4, lines 22-46, col. 6, lines 13-67, col. 7, lines 1-5, col. 10, lines 9-18, and col. 15, lines 15-26) and SQL query for collection descriptor in the relational databases and attribute of constraint that has heavier weight associated therewith as claimed (col. 1, lines 39-60, col. 9, lines 33-43, and col. 18, lines 51-67, col. 4, lines 22-46, col. 6, lines 13-67, col. 7, lines 1-5, col. 10, lines 9-18, and col. 15, lines 15-26).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Hendrickson with the teachings of Morgenstern so as to obtain have a method of automating navigation between data with dissimilar structures including dataset, data elements, collection of data elements, distance metric and computed distance metric because the combination would provide a method for integrating data between the source and target data including providing an interoperability with specifications for transforming the data into a common intermediate representation of the data using the specifications, transforming the intermediate representation of the data into a specialized target representation using the specifications (Morgenstern - col. 2, lines 60-67, and col. 3, lines 1-34) in the automation navigation between dynamic data with dissimilar structured environment.

Claim 16 is essentially the same as claim 5 except that it is an apparatus rather than a method (col. 1, lines 39-60, col. 9, lines 33-43, and col. 18, lines 51-67), and is rejected for the same reasons as applied to the claim 5 hereinabove.

Claim 17 is essentially the same as claim 6 except that it is an apparatus rather than a method (col. 14, lines 19-38, and col. 17, lines 19-40), and is rejected for the same reasons as applied to the claim 6 hereinabove.

Claim 19 is essentially the same as claim 8 except that it is an apparatus rather than a method (col. 10, lines 9-67, and col. 11, lines 1-15, col. 1, lines 39-60, col. 9, lines 33-43, col. 18, lines 51-67), and is rejected for the same reasons as applied to the claim 8 hereinabove.

Claim 20 is essentially the same as claim 9 except that it is an apparatus rather than a method (col. 1, lines 39-60, and col. 9, lines 33-43, and col. 18, lines 51-67), and is rejected for the same reasons as applied to the claim 9 hereinabove.

Claim 21 is essentially the same as claim 10 except that it is an apparatus rather than a method (col. 4, lines 22-46, col. 6, lines 13-67, col. 7, lines 1-5, col. 10, lines 9-18, and col. 15, lines 15-26), and is rejected for the same reasons as applied to the claim 10 hereinabove.

Claim 22 is essentially the same as claim 11 except that it is an apparatus rather than a method (Col. 1, lines 39-60, col. 9, lines 33-43, col. 18, lines 51-67, col. 4, lines 22-46, col. 6, lines 13-67, col. 7, lines 1-5, col. 10, lines 9-18, and col. 15, lines 15-26), and is rejected for the same reasons as applied to the claim 11 hereinabove.

With respect to claim 25, Hendrickson discloses a method of automatically navigation as discussed in claim 24. Also Hendrickson discloses the distance metric as claimed (col. 4, lines 11-38, col. 5, lines 65-67 and col. 6, lines 1-18).

Hendrickson does not explicitly indicate, "generating one or more preliminary

target collection descriptors associated with the one or more target collections by

transforming a source collection descriptor associated with the source collection; and

removing constraints associated with the one or more preliminary target collection

descriptor until a non-null element collection is obtained."

However, Morgenstern discloses target collection descriptor; removing

constraints associated with the at least one preliminary target collection descriptor until

a non-null element collection is obtained as claimed (col. 10, lines 9-67, col. 11, lines 1-

15, col. 1, lines 39-60, col. 9, lines 33-43, and col. 18, lines 51-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to combine the teachings of Hendrickson with the

teachings of Morgenstern so as to obtain have a method of automating navigation

between data with dissimilar structures including dataset, data elements, collection of

data elements, distance metric and computed distance metric because the combination

would provide a method for integrating data between the source and target data

including providing an interoperability with specifications for transforming the data into a

common intermediate representation of the data using the specifications, transforming

the intermediate representation of the data into a specialized target representation using

the specifications (Morgenstern - col. 2, lines 60-67, and col. 3, lines 1-34) in the

automation navigation between dynamic data with dissimilar structured environment.

Claim 27 is essentially the same as claim 25 except that it is an apparatus rather

than a method (col. 10, lines 9-67, and col. 11, lines 1-15, col. 1, lines 39-60, col. 9,

lines 33-43, col. 18, lines 51-67), and is rejected for the same reasons as applied to the

claim 25 hereinabove.

Contact Information

6.   Any inquiry concerning this communication should be directed to Anh Ly whose

telephone number is (703) 306-4527. The examiner can be reached on Monday - Friday

from 8:00 AM to 4:00 PM.

If attempts to reach the examiner are unsuccessful, see the examiner's

supervisor, Kim Vu, can be reached on (703) 305-4393.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 746-7238 (after Final Communication)

or:

(703) 746-7239 (for formal communications intended for entry)

or:

(703) 746-7240 (for informal or draft communications, or Customer Service

Center, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

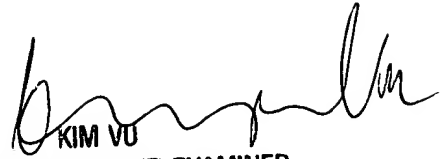Drive, Arlington, VA, Fourth Floor (receptionist).

Inquiries of a general nature or relating to the status of this application should be

directed to the Group receptionist whose telephone number is (703) 305-3900.

AL

Mar. 22nd, 2002.

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100